

A NEW CRENULASPIDIOTUS FROM ARIZONA

(HOMOPTERA: DIASPIDIDAE)^{1,2}JOHN A. DAVIDSON, *Department of Entomology, University of Maryland, College Park, Maryland 20742*

ABSTRACT—The adult female and male and female scale covers of *Crenulaspidotus mini*, n. sp., from *Prosopis* sp. in Arizona are described and illustrated.

Borchsenius (1966) recognized 4 species of *Crenulaspidotus* for the world. Two of these, *C. portoricensis* (Lindinger) and *C. sinuata* (Ferris), were transferred from the genus *Melanaspis* and occur in North America. The purpose of this paper is to describe a new species found recently in Arizona.

***Crenulaspidotus mini* Davidson, n. sp.**

(Figs. 1–4)

HOLOTYPE FEMALE: Body slightly turbinate (fig. 2), 0.6 mm. long, derm membranous. First 3 prepygidial abdominal segments lobed, derm wrinkled marginally. Pygidium (fig. 3) broad, dorsal sclerotization strongly developed in 7 sclerotized areas as follows: median sclerotized area largest with a pair of lateral furrows flanking the anus, the median most furrow uniting with the furrow bordering the 2nd, 3rd and 4th areas; 2nd sclerotized area smallest, arising between the bases of the 2nd and 3rd lobes; 3rd sclerotized area arising between lobes 3 and 4, bearing 3 small ducts mesally; 4th sclerotized area narrow, arising from the base of lobe 4, bearing 2 small ducts mesally. Four pairs of distinct pygidial lobes (fig. 4) present as follows: median lobes low, broad, rounded, with the longest paraphyses arising from their bases; 2nd lobes low, broad, slightly notched, with 3 basally fused paraphyses; 3rd lobes 2-notched, with 1 long paraphysis basally expanded laterally; 4th lobes 2-notched, with 1 short paraphysis basally expanded laterally; 5th lobes replaced by a wide, many-notched, slightly sclerotized prominence.

One interlobular paraphysis between lobes 1 and 2, 2 between lobes 2 and 3, 2 between lobes 3 and 4, 4 anterior to lobe 4, each bearing 1 short spine-like plate apically and marginal macroducts located between their bases. Pygidial venter with a V-shaped sclerotized area below the anus; perivulvar pores lacking; perivulvar squamatus present; 4–5 ventral microducts disposed in 2 rows. First 2 prepygidial segments with submarginal microducts; marginal microducts extend anteriorly to the level of the mouthparts; a cluster of microducts present lateral to the mouthparts; antennal seta slightly expanded beyond mid-length.

HABIT: Occurring in great numbers exposed on the bark of twigs. Female scale cover (fig. 1) 0.7–1.0 mm. in diameter, black, circular to slightly elongate,

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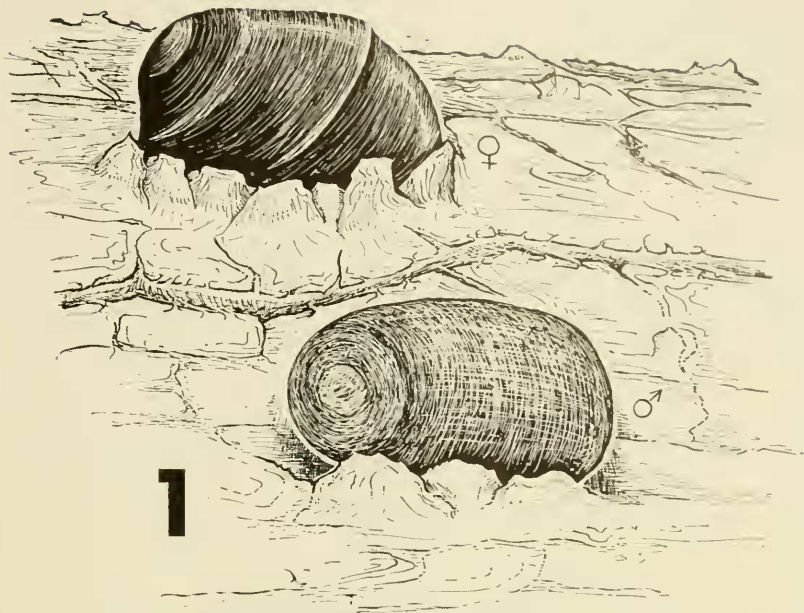


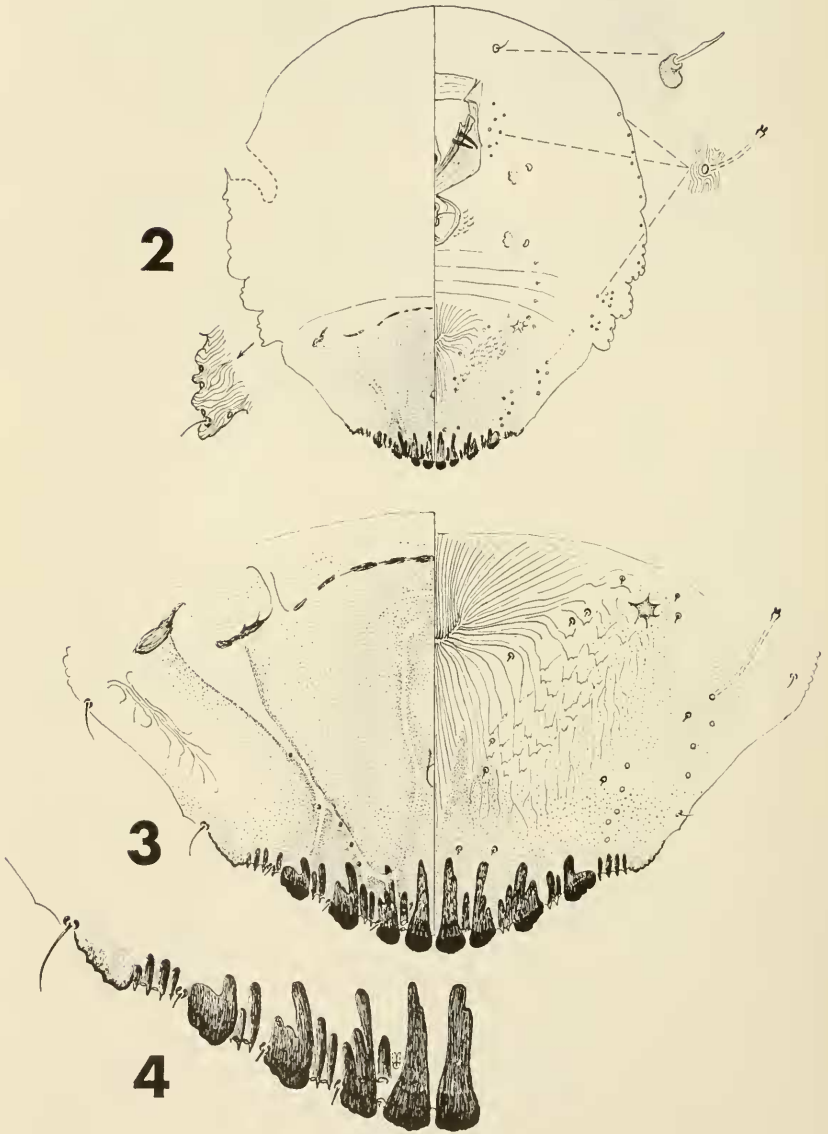
Fig. 1. *Crenulaspidotus mini*, n. sp., ♂ and ♀ scale covers.

highly convex, tilted up at one side at maturity, often surrounded by bark flakes, exuvium subcentral, and ventral scale present. Male scale cover (fig. 1) elongate oval, flattened, grayish, 0.4–0.6 mm. wide and 0.8–1.2 mm. long, with exuvium at one end and ventral scale present. Very few male scale covers are present on the twigs examined. No adult males were found.

TYPE DATA: The female holotype, USNM 70836, and 49 paratypes were collected July 15, 1969, on *Prosopis* sp., 31 miles south of Gila Bend, Pima Co., Arizona, by D. B. Carver and P. F. Min, Arizona #Phnx-1-69. Known only from a single collection. Paratypes are deposited in the collections of the Bureau of Entomology, California State Department of Agriculture; Department of Entomology, University of California, Davis; U.S.N.M.; Department of Entomology, University of Maryland.

TAXONOMIC DISCUSSION: This species closely resembles *C. portoricensis*, particularly in the shape of the dorsal sclerotized areas and accompanying furrows on the pygidium. *C. mini* is distinctive because the longest paraphyses arise from the median lobes, multiple paraphyses arise from lobe 2, and 2 or more paraphyses arise from between lobes 2, 3 and 4 respectively.

VARIATION: As this species ages, the entire pygidium becomes gradually sclerotized and the pygidial apex appears to eventually dis-



Figs. 2-4. *Crenulaspidiotus mini*, n. sp.: 2, entire ♀, dorsal and ventral views; 3, enlargement of dorsal and ventral views of pygidium; 4, enlargement of pygidial margin, dorsal view.

integrate. Only young females whose scale covers are still relatively flattened make suitable study mounts. There is considerable variation in the shape of paraphyses arising from the bases of lobes. There seems to be a tendency for these paraphyses to be divided apically into 2 or 3 indistinct projections. Interlobular paraphyses, while for the most part completely separated, may be seen partially fused.

ACKNOWLEDGMENTS

I wish to thank Mr. R. F. Wilkey, Systematic Entomologist, Bureau of Entomology, California Department of Agriculture, who first recognized this as a new species and made the dry material and 20 slides available. This species is named in honor of Paul F. Min, Arizona Agrochemical Corporation, Phoenix, Arizona.

REFERENCE

Borchsenius, N. S. 1966. A Catalogue of the Armored Scale Insects (Diaspididae) of the World. Akad. Nauk, SSSR, Moscow, 449 p.

TWO HOMONYMIC SPECIES NAMES IN ANOBIIDAE

(COLEOPTERA)

Maurice Pic in 1947 (L'Echange 63(507):3) described *Xyletinus robustus* from Africa. This name is preoccupied by *X. fulvicollis robustus* Pic (1924, L'Echange 39(418):29); I hereby replace the preoccupied name with *X. africanus* White, **new name**.

Pic in 1949 proposed *Lasioderma curtum* (Rev. France d'Ent. 16(2):88). This name is preoccupied by *L. curtum* Pic (1947, L'Echange 63(507):4). As a replacement I hereby propose *L. pici* White, **new name**, for the former species.—**RICHARD E. WHITE**, Systematic Entomology Laboratory, Agr. Res. Serv., U.S. Department of Agriculture, c/o U.S. National Museum, Washington, D.C. 20560.